

MATERIAL SAFETY DATA SHEET**888-1045 COLORTREND®RED OXIDE****F**

degussa.

Material no.

Specification

138979

Order Number

Version

Revision date

Print Date

Page

1.2 / US**09/24/2004****9/24/2004****1 / 10****1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : 888-1045 COLORTREND®RED OXIDE F
Use of the Substance / : Aqueous colorant
Preparation
Company : Degussa Corporation
379 Interpace Parkway
Parsippany, NJ 07054
USA

Telephone : 973-541-8000

Telefax : 973-541-8040

US: CHEMTREC EMERGENCY NUMBER : 800-424-9300

CANADA: CANUTEC EMERGENCY NUMBER : 613-996-6666

Product Regulatory Services : 973-541-8060

2. COMPOSITION/INFORMATION ON INGREDIENTS**Information on ingredients / Hazardous components**

NJTSR No.56705700001-5043P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	5.0 - 10 %
ethanediol; ethylene glycol			
CAS-No.	107-21-1	Percent (Wt./ Wt.)	10 - 30 %
Diethylene glycol			
CAS-No.	111-46-6	Percent (Wt./ Wt.)	1.0 - 5.0 %
Talc, Magnesium silicate hydrate			
CAS-No.	14807-96-6	Percent (Wt./ Wt.)	1.0 - 5.0 %
Iron oxide			
CAS-No.	1332-37-2	Percent (Wt./ Wt.)	30 - 60 %
NJTSR No.56705700001-5030P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1.0 - 5.0 %

Other information

This material is classified as hazardous under OSHA regulations.

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1.2 / US**09/24/2004****9/24/2004****2 / 10****3. HAZARDS IDENTIFICATION******* EMERGENCY OVERVIEW *******Form-paste Colour-red Odour-Glycol odor.**

May cause eye, skin and respiratory tract irritation. May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS**Eye contact**

According to test results on COLORTREND base mixtures, this product is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

Skin Contact

COLORTREND colorants may cause irritation.

Inhalation

COLORTREND colorants may cause irritation.

Ingestion

Moderately toxic. May be harmful if swallowed.

Ingestion of ethylene glycol may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, irritability and central nervous system effects. Swallowing large volumes of ethylene glycol causes severe kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal.

The human oral lethal dose is approximately 1.6 g/kg.

Ingestion of excessive amounts of diethylene glycol causes abdominal discomfort or pain, nausea, vomiting, dizziness, central nervous system effects, kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal (estimated human oral lethal dose, 1.0 to 1.2 g/kg) and may cause liver effects.

Chronic Health Hazard

Ethylene glycol may aggravate an existing kidney disease. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material. Repeated inhalation of ethylene glycol mist may produce signs of central nervous system involvement, particularly dizziness and drowsiness.

Prolonged inhalation of iron oxide dust is known to produce a condition known as siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis producing materials such as silica.

Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice.

Because this product is a free-flowing liquid or paste, dust inhalation is not an expected route of exposure.

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4. FIRST AID MEASURES**Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

Skin contact

Flush skin with plenty of water. Remove contaminated clothing. Obtain medical attention if irritation develops or persists.

Eye contact

In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

Ingestion

If swallowed give two glasses of water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURESFlash point:

not determined

Method: No information available.

Lower explosion limit:

not determined

Upper explosion limit:

not determined

Autoignition temperature:

not determined

Suitable extinguishing media

In case of fire, use water (flood with water), dry chemical, CO2 or "alcohol" foam.

Specific hazards during fire fighting

Contains material that can burn in fire if contained water is evaporated by heat or fire.

Further information

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Wear personal protective equipment; see section 8.

Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

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1.2 / US**09/24/2004****9/24/2004****4 / 10****Methods for cleaning up**

Ventilate area. Absorb spill with inert material and place in a chemical waste container.

7. HANDLING AND STORAGE**Handling****Safe handling advice**

Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage**Requirements for storage areas and containers**

Keep in a dry, cool place.

Keep container closed when not in use.

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Occupational exposure controls****• ethanediol; ethylene glycol**

CAS-No. 107-21-1

Control parameters 100 mg/m3
Aerosol.

Ceiling Limit Value:(ACGIH)

• Talc, Magnesium silicate hydrate

CAS-No. 14807-96-6

2 mg/m3

Respirable fraction.

The value is for particulate matter containing no asbestos and <1% crystalline silica.

5 mg/m3

Respirable fraction.

PEL:(OSHA Z1)

15 mg/m3

Total dust.

PEL:(OSHA Z1)

• Iron oxide

CAS-No. 1332-37-2

Respirable fraction.
Listed.

(Z3)

5 mg/m3

Respirable fraction.

PEL:(OSHA Z1)

15 mg/m3

PEL:(OSHA Z1)

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Total dust.

3 mg/m3

Respirable particles.

Time Weighted Average (TWA):(ACGIH)

10 mg/m3

Inhalable particles.

Time Weighted Average (TWA):(ACGIH)

Other information

The exposure value for ethylene glycol is given as an aerosol.

The AIHA WEEL for diethylene glycol is 50 PPM for total vapor and aerosol and 10 mg/m3 for aerosol alone (eight hour time-weighted averages).

The OSHA TWA and ACGIH TWA exposure values for talc are for asbestos free talc expressed as millions of particles per cubic foot (mppcf).

The exposure limit for iron oxide is for dust and fume as Fe.

Engineering measures

Use only in well-ventilated areas.

Personal protective equipment**Respiratory protection**

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Use impermeable gloves.

Eye protection

Chemical resistant goggles must be worn.

Skin and body protection

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form

paste

Colour

red

Odour

Glycol odor.

Safety data

pH

8.0 - 9.2

Boiling point/range

> 100 °C

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Flash point	Method: No information available. not determined
Autoignition temperature:	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Relative density	2
Solubility/qualitative	Solubility in water: Dispersible.
Viscosity, dynamic	85 - 100 KU (25 °C)
Evaporation rate	Slower than butyl acetate

10. STABILITY AND REACTIVITY

Conditions to avoid	Not applicable.
Materials to avoid	strong acids, oxidizing substances
Further information	Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Component	Acute oral toxicity	NJTSR No.56705700001-5043P Trade Secret LD50 rat: 3000 mg/kg
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ethanediol; ethylene glycol
107-21-1
LD50 rat: 4000 mg/kg

Diethylene glycol
111-46-6
LD50 rat: 20760 mg/kg

Iron oxide
1332-37-2
LD50 rat: > 5000 mg/kg

NJTSR No.56705700001-5030P
Trade Secret
LD50 rat: 2750 mg/kg

Component	Acute dermal toxicity	NJTSR No.56705700001-5043P Trade Secret
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LD50 rabbit: 2800 mg/kg

ethanediol; ethylene glycol

107-21-1

LD50 rabbit: 10500 mg/kg

Diethylene glycol

111-46-6

LD50 rabbit: 13300 mg/kg

General Toxicity Information

According to long-term animal inhalation studies, very high concentrations of diethylene glycol vapors caused central nervous system effects in mice and rats. However, an extensive review of the literature shows that no such effects have been documented in humans (Patty's Industrial Hygiene and Toxicology, 1982, Third Revised Ed., Vol 2c, p 3838).

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. However, there is no available information to suggest that ethylene glycol has caused birth defects in humans.

In a continuous breeding study of mice, continued ingestion of large amounts of diethylene glycol (6 g/kg/day) caused an adverse effect on fertility and some embryotoxic and fetotoxic effects concurrent with some maternal toxicity. The relevance of these very high doses to humans is uncertain.

12. ECOLOGICAL INFORMATION**General Ecological Information**

No ecotoxicological studies are available.

13. DISPOSAL CONSIDERATIONS**WASTE****Advice on disposal**

Waste must be disposed of in accordance with federal, state, provincial and local regulations. **CONTAINER DISPOSAL:** Empty containers by removing the top and inverting to allow all free flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. **Note:** Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with water until the containers are considered generally product free.

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1.2 / US**09/24/2004****9/24/2004****8 / 10****14. TRANSPORT INFORMATION****Transport/further information**

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION**Information on ingredients / Non-hazardous components**

This product contains the following non-hazardous components

Water

CAS-No.

7732-18-5

Percent (Wt./ Wt.)

10 - 30 %

US Federal Regulations**OSHA**

If listed below, chemical specific standards apply to the product or components:

- None Listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- ethanediol; ethylene glycol
CAS-No. 107-21-1

CERCLA Reportable Quantities

If listed below, a Reportable quantity(RQ) applies to the product based on the percent of the named component:

- ethanediol; ethylene glycol
CAS-No. 107-21-1
Reportable Quantity 30941 lbs

SARA Title III section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- ethanediol; ethylene glycol
CAS-No. 107-21-1

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1.2 / US**09/24/2004****9/24/2004****9 / 10****Toxic Substances Control Act (TSCA)**

If listed below, non proprietary substances are subject to export notification under Section 12 (b) of TSCA

- None Listed

State Regulations**California Proposition 65**

A warning under the California Drinking Water Act is required only if listed below:

- None Listed

International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact Degussa Corporation Product Regulatory Department:

- | | |
|--------------------------|---------------------------|
| • Europe (EINECS/ELINCS) | Listed/registered |
| • USA (TSCA) | Listed/registered |
| • Canada (DSL) | Listed/registered |
| • Australia (AICS) | Listed/registered |
| • Japan (MITI) | Not listed/Not registered |
| • Korea (TCCL) | Not listed/Not registered |
| • Philippines (PICCS) | Not listed/Not registered |
| • China | Not listed/Not registered |

16. OTHER INFORMATION**HMIS Ratings**

Health :	2
Flammability :	1
Physical Hazard :	0

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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